

## Rotate Array [\(View\)](#)

Given an array, rotate the array to the right by  $k$  steps, where  $k$  is non-negative.

### Example 1:

**Input:** `nums = [1,2,3,4,5,6,7]`, `k = 3`

**Output:** `[5,6,7,1,2,3,4]`

**Explanation:**

rotate 1 steps to the right: `[7,1,2,3,4,5,6]`

rotate 2 steps to the right: `[6,7,1,2,3,4,5]`

rotate 3 steps to the right: `[5,6,7,1,2,3,4]`

### Example 2:

**Input:** `nums = [-1,-100,3,99]`, `k = 2`

**Output:** `[3,99,-1,-100]`

**Explanation:**

rotate 1 steps to the right: `[99,-1,-100,3]`

rotate 2 steps to the right: `[3,99,-1,-100]`

### Constraints:

- `1 <= nums.length <= 105`
- `-231 <= nums[i] <= 231 - 1`
- `0 <= k <= 105`

### Follow up:

- Try to come up with as many solutions as you can. There are at least **three** different ways to solve this problem.
- Could you do it in-place with  $O(1)$  extra space?